RESEARCH PROJECTS

Cloud Computing Service Selection and Cost Estimation
Christian Plewnia

DevOps-aware Software Engineering
Andreas Steffens

Software Engineering for ML Systems
Selin Aydin

Transformation towards Test Automation
Nils Wild

Enterprise Architecture Debt Management
Peter Alexander

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FEBRUARY: Doctoral Defense of Konrad Fögen

On February 10, Konrad Fögen successfully passed his Ph.D. defense on “Combinatorial Robustness Testing based on Error-Constraints” and successfully passed the doctoral examination.

Thanks to Prof. Claus Lewerenz for supporting this defense!

Konrad is now with Thoughworks.

Congratulations!
HIGHLIGHTS

FEBRUARY: Final SW Lab Presentations

This year, KISTERS and apoBank supported our Bachelor Software Labs. The following topics were elaborated by the students:

- **Resilience Engineering von Software Landschaften** (together with KISTERS, Aachen)
- **Data Analytics im FinTech Umfeld** (together with apoBank, Düsseldorf)

The final presentations were given virtually.

Thanks to both cooperation partners for offering this opportunity.

Thanks to Selin and Alex for managing the labs!
This year, we organized our yearly research retreat Adin in Hürtgenwald under the COVID-19 restrictions.
Collocated with the 28th Asia-Pacific Software Engineering Conference (APSEC 2021), we organized the 9th International Workshop “Quantitative Approaches to Software Quality” (QuASoQ).

This year, the workshop was again conducted virtually. Four papers were presented and 10 researchers attended the workshop.
WHAT ELSE HAPPENED ...

SIMON HACKS APPOINTED AS ASSISTANT PROFESSOR – SOFTWARE ENGINEERING AT UNIVERSITY OF SOUTHERN DENMARK (SDU)

In August, Simon started his new position as Assistant Professor in Software Engineering at The Maersk Mc-Kinney Moller Institute, University of Southern Denmark.

Simon was a member of SWC from 2015-2019.

Congratulations Simon!

EA DEBTS STUDENT CONFERENCE

In December, the 2nd EA Debts Student Conference took virtually place. The conference was organized by a group of international researchers. Peter as well as our formal member Simon Hacks are members of this group.

The aim of the conference is to provide the students with the opportunity to present their work to interested practitioners and fellow students as well as gather feedback from the audience.
WHAT ELSE HAPPENED …

NEW RESEARCH PROJECT WITH IVU AACHEN

In September, we started a new research project with IVU Aachen. The topic of this project is to develop new automation approaches for testing the integration of new and existing applications.

Nils is in charge of this project.

NEW RESEARCH PROJECT WITH apoBank DÜSSELDORF

In February, we started a new research project with apoBank Düsseldorf. There, the focus is to support the development of a security architecturer for the systems of innovation.

Alex is in charge of this project.

NEW RESEARCH PROJECT WITH KISTERS AACHEN

In August, we started a new research project with KISTERS Aachen. In this project Software Engineering approaches for Machine Learning Systems are tested and evaluated.

Selin is in charge of this project.


